# TECHNICAL MANAGEMENT TEAM MEETING NOTES

March 2, 2005
Corps of Engineers Reservoir Control Center
Portland, Oregon

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS
Facilitator: Donna Silverberg

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

**WMP Spring/Summer Update**:
Cindy Henriksen, COE, reported that since the last TMT meeting, at which the draft spring/summer update to the WMP was first presented, there had been no comments submitted to the action agencies and no changes made to the draft. The March final water supply forecast, expected available around March 10, could change flow objectives and flood control elevation targets. Specific changes to this year's update from last year include Upper Snake flow and spill triggers. Cindy noted that the MOP operations implemented last year are included in this year's WMP.

**ACTION**: TMT will review the next draft update at the March 16 TMT meeting.

**Implementation Plan**:
Eric Braun, COE, and Nic Lane, BPA, provided a handout and briefed the group on the action agencies' 2005-2007 Implementation Plan, including scheduling of annual progress reports and comprehensive evaluations in 2008 and 2011. The draft implementation plan addresses near and long term priorities for the implementation strategies, includes specific implementation details for 2005 and 2007 to achieve the ESU specific life-stage targets, and addresses implementation of the 2004 BiOp Incidental Take statement. Strategies guiding implementation are specified for the hydro-system; predator control; habitat; hatcheries; and research, monitoring and evaluation (RM&E). The action agencies are interested in continued input through regional forums on implementation of the BiOp using adaptive management practices.

A question was asked about funding for actions in the plan. Allocations will go to the 'best use of available funds'. Adjustments can be made, such as for research, based on changing conditions. Funding prioritization and other budget issues are discussed at SCT in the Regional Forum, and at the NPCC outside the Regional Forum. The IP does not include budget information for specific actions. It was suggested that regional guidance, discussion and oversight about the Implementation Plan could occur at IT. This suggestion will be shared with IT members who are currently working to develop an IT work plan.

**ACTION**: The Implementation Plan will be posted at www.salmonrecovery.gov within the next few days. Once posted, there will be a 30-day opportunity for comment. Anyone that is interested in getting on the federal caucus email notification list for postings to the site should share with Nic Lane and/or call Katherine Cheney at BPA.

**Status of Operations**

*Reservoirs* – Grand Coulee is at elevation 1274.3' and targeting 1255' by the end of March. Hungry Horse is at 3545.8', Libby is at elevation 2412', releasing 4 kcfs and not expected to reach April 10 flood control elevation. Dworshak is at 1565', with a March 31 flood control elevation target of 1585'. Day average flows are 20 kcfs at Lower Granite, 110-120 kcfs at McNary, and 120 kcfs at Bonneville. The March early bird forecast for The Dalles Jan-July is 71.2 MAF (66% of normal), 50.6 MAF (80% of normal) at Grand Coulee, and the April-Jul at Lower Granite is 105 MAF (49%) of normal).

*Fish* – Cindy LeFleur, WDFW, provided a Columbia River fall chinook pre-season forecast, which indicates that all stocks will experience good to strong returns. The upriver brights show the strongest forecasted return. The forecast for the total fall chinook return is 650,000 (compared to last year's actual of ~800,000). The forecast is based on the best technical estimate of federal, state and tribal fisheries managers. Forecasts are adjusted throughout the season.

Ron Boyce, ODFW, provided a chum operations update. Four chum have been caught so far. The estimated emergence start date was January 19. Ron also noted that in 2000-2004, the last catch date ranged from April 25-May 24. Additional information can be found on the Fish Passage Center website (which will be linked to future TMT agendas).

**SOR 2005-2**

The salmon managers submitted SOR 2005-2 for fishery operations at Bonneville following the March 2 Spring Creek hatchery release. Dave Wills, USFWS, thanked BPA and the COE for providing conditions last week to allow the salmon managers to do a site visit to find where chum redds were located. Based on this observation, the following specifications were written into the request:

- Starting March 3 AM, operate the B2 corner collector for five days, until March 8 AM. Provide a sixth day if sufficient numbers of hatchery fish (sufficient = 'low hundreds of fish per day') are still passing the project.
- Operate to maintain a minimum 12.5' tailwater elevation in order to not exceed 105% TDG at the chum redds locations at Ives Island and on the Oregon shore to the Multnomah Falls area.
- Use flexibility in the system to accomplish this while maintaining the target 1255' elevation at Grand Coulee for drum gate work in April.

The action agencies expressed concern about the last minute request for an extra foot of depth compensation for any longer than 4 days because the river is not set up to do this. It will take time to get water down from Grand Coulee. And, with the water supply forecast trending downward and no precipitation forecasted in the near future, there is great concern about having a sufficient amount of water left after the operation to maintain

protection of the redds at 11.5'. The COE expressed interest in monitoring TDG levels overnight after the corner collector is opened, to determine if the tailwater elevation could be lowered without exceeding 105%. Alternative options for operations were generated by the group:

- Stop using the corner collector;
- Revisit depth compensation issue with new surveys to determine whether tailwater can be lowered while still protecting the redds from dissolved gas harm;
- Close spill bays 1 and/or 18 if there are low numbers of adults passing;
- Do real time start of operation if travel time is slow (later in the day on March 3);
- Operate PH 1 by keeping corner collector water in the middle of the river to address TDG concerns;
- Fluctuate tailwater elevations throughout the 24-hour period to control gas levels.

**ACTION**: The COE will begin the operation (open the corner collector) on March 3 when fish are present (as late as 3 pm). The COE will collect TDG data overnight and the salmon managers will gauge TDG levels at the chum redd locations. With this new information and further thought on the options generated today, TMT will revisit the issue during a conference call on **Friday, March 4, at 1 pm** (call-in number 503-808-5190). *NOTE* – there may be a need for additional calls to discuss the operation on Saturday, March 5 and/or Monday, March 7, depending on changing conditions.

**ACTIONS/NEXT MEETING AGENDA**:

*Actions from 3/2/05 meeting:*

- Gather TDG data at Bonneville – COE
- Gather TDG data at chum redds locations – Salmon Managers
- TMT conference call to discuss SOR 2005-2, Friday 3/4, 1pm – All
- Implementation Plan posted to www.salmonrecovery.gov – Action Agencies
    - 30-day comment period – All
- Update WMP spring/summer update – COE

*Next TMT meeting, March 16, 9am-noon will include at least the following*:

- Update on SOR 2005-2 Operations
- Bonneville Spill Gate Calibration
- Draft WMP Spring/Summer Update– March final forecast, modeling information
- WMP Issues?
    - MOP Operations

***1. Greetings and Introductions.***

Today's Technical Management Team meeting was chaired by Cindy Henriksen and facilitated by Donna Silverberg, who led a round of introductions and a review of today's agenda. The following is a summary (not a verbatim transcript) of the issues discussed and decisions made at today's meeting. Anyone with questions about these notes should contact Henriksen at 503/808-3945.

***2. Chum Update.***

Ron Boyce reported that ODFW had only caught four emerging chum in its spawning ground surveys so far, up through last week. We did an initial projection of emergence timing, he said, which came out to January 19 for the earliest spawners. We also developed a range of dates for last-caught newly-emerged fry for the last 5 years -- it ranged from April 25-May 24, said Boyce. The bottom line is that we have caught very few newly-emerged chum so far, but we have caught a number of newly-emerged chinook. In response to a question, Boyce said the four chum were caught in the standard seining area. He added that this information is posted to the FPC website, and said he will provide further updates as more information becomes available.

***3. Spring/Summer Update.***

Henriksen said the Spring/Summer update was discussed at the last TMT meeting; we have not received any comments or made any significant changes since the last TMT meeting, she said. We're waiting for the March final water supply forecast to update the flow objectives, flood control elevations etc. contained in the spring/summer update. The forecast should be available the middle of next week; we should have our flood control calculations re-worked a day or two later. The spring/summer update will then be revised, and we'll do some hydrologic modeling runs to look at seasonal flows at Lower Granite and elsewhere, Henriksen said.

Will we need to revisit this once it has been updated? Silverberg asked. Yes, Henriksen replied. The only real change is the spill trigger in the Lower Snake; we have the same MOP operation in this year's update that we did last year. Tony Norris said he will be updating the Upper Snake flow augmentation numbers in the update; Reclamation is currently estimating that about 250 kaf will be available from the Upper Snake in 2005. Henriksen said the Corps will try to complete its updates prior to the March 16 TMT meeting.

***4. Update on Implementation Plans.***

Eric Braun and Nic Lane led this update, titled "2005-2007 FCRPS Implementation Plan." They touched on the following major topics:

- UPA/BiOp/IP Overview – 2004 FCRPS Updated Proposed Action vs. 2005-2007 Implementation Plan
- Schedule and process – 3-year implementation plans with annual progress reports, with comprehensive evaluations in 2008 and 2011
- Annual progress reporting – based on ESU and H-specific performance metrics in the BiOp and UPA; performance metric examples include (hydro) adult abundance and trends, adult survival, total system and in-river juvenile survival; (predator control) annual predation rates; (habitat) cfs tributary water protected, miles of complexity restored; (estuary) acres of shallow water habitat protected; (hatcheries) operation of safety-net programs, construction of Oxbow Hatchery for sockeye protection etc.
- Comprehensive evaluation reports – evaluates progress toward achieving UPA 3- and 6-year performance metrics/standards

- What's in the draft Implementation Plan? Near- and long-term priorities for the implementation strategies; specific implementation details for 2005 to 2007 to achieve ESU-specific life-stage targets; address implementation of the 2004 BiOp incidental take statement; prioritized actions address needs of greatest number of ESUs first; comprehensive monitoring program to determine the effectiveness of actions implemented under the UPA
- Conservation actions – the action agencies have agreed to continue existing programs to support additional habitat improvements, initiatives and measures; not included in the draft IP, however. Conservation actions may be included in annual progress reports as contributing to recovery
- Strategies guiding implementation – hydrosystem strategies
- 2005-2007 hydrosystem highlights – Ice Harbor RSW in 2005, develop surface bypass at McNary, Little Goose, John Day and Lower Monumental; The Dalles BGS in 2007; juvenile fish bypass system and monitoring improvements at several dams; Snake River fall chinook study in 2005; flow augmentation and spill continue; juvenile fish transport program adjusted based on research
- Predator control strategies – redistribute avian predators; reduce Northern pikeminnow predation; RM&E. Includes an expanded Northern pikeminnow management program
- Habitat strategies – tributary habitat protection and improvement; habitat protection and improvement in the estuary
- Hatcheries strategies – implement a safety-net program as an interim measure to avoid extinction; reduce potentially harmful effects of artificial production to aid recovery
- RM&E strategies – status monitoring, action effectiveness monitoring and research, critical uncertainties research, project implementation monitoring, data management system, regional coordination

Lane offered the following summary of his presentation:

- The Implementation Plan is the follow-up to the November 2004 final UPA that included collaboration and public input
- Regional discussions will continue over the long term, on how best to adjust actions based on performance results
- The action agencies are interested in continued input through the Regional Forum teams

Are you planning to accept comments on the Implementation Plan? Kyle Martin asked. We're posting the IP to the salmonrecovery.gov website, and are soliciting comments, Braun replied. Comments will be accepted for 30 days once the plan has been posted, he added.

Is there any provision for increased PIT-tagging? asked Cindy LeFleur. I'm not sure, Braun replied – the number of PIT tags is generally established in the study plans. Most PIT-tagging is transportation study-related, added Paul Wagner – I'm not aware of any specific plan to re-allocate those tags. There is no base number that we use as a monitoring tool, he said. In response to a question from Rudd Turner, Braun said comments on the IP itself will come directly to the action agencies; any issues related to

the specific actions in the IP will be addressed through the Regional Forum teams – the TMT, IT and SCT. The Implementation Team will be the forum for reporting on implementation progress. In response to another question, Lane said funding for some actions will be prioritized through the Council process; funding for system configuration line-items will be prioritized through the System Configuration Team.

***5. Status of Operation.***

Norris said Grand Coulee is at elevation 1274.3 feet and drafting toward elevation 1255 by the end of the month; Hungry Horse is at 3545.8 feet and running to meet the Columbia Falls minimum. Henriksen said the March early-bird water supply forecast is continuing on a downward trend. At Lower Granite, the early-bird is down to nearly 10 MAF. Libby is releasing 4 Kcfs and hovering at elevation 2412. It is not expected to meet elevation 2435, its March 31 flood control point. At Dworshak, the current elevation is 1565, 35 feet from full. Its March 31 flood control elevation is 1585; we're examining that within the Corps. We're pursuing some additional information from the NRCS as to the snow-covered area in the basin, which will dictate how much space we need to evacuate for flood control at Dworshak. Current flows are low; Lower Granite has been averaging about 20 Kcfs – 17-22 Kcfs on a day-average. The flow at McNary is 110-120 Kcfs. Bonneville has been relatively steady at a day average of about 120 Kcfs.

Henriksen said the March early-bird forecast at The Dalles is now 71.2 MAF, 66% of average, down from 85 MAF at the beginning of January. At Grand Coulee, the March early-bird forecast is 50.6 MAF, 80% of average. At Lower Granite, the April-July March early-bird forecast is 10.5 MAF, only 49% of average. The most recent Brownlee forecast was at 35% of average. Henriksen noted that the early-bird forecast is used to show the trend of the forecast, rather than for management purposes – it includes snow and runoff, but it's not a complete data set. My understanding is that Arrow is holding its own? Wagner said. Correct, Norris replied – that's the only thing that's saving our bacon.

Moving on to fish, LeFleur said WDFW's 2005 Columbia River fall chinook forecast is for a total of 650,000 returning adults, down from 792,000 actual 2004 returns. She noted that the February 2004 pre-season forecast was 621,800; actual returns exceeded the forecast by 170,000 fish. She noted that the upriver bright return looks particularly strong in 2005, as much as 65% greater than the recent 10-year average of 212,600.

Wills said the Fish and Wildlife Service has submitted an SOR (SOR 2005-2) covering spill for the Spring Creek release; the salmon managers (USFWS, IDFG, ODFW, WDFW, NOAA Fisheries, the Nez Perce Tribe, the Shoshone-Bannock Tribes and CRITFC) are requesting the following specific operations following the March 2 release of the Spring Creek fish:

- No operation of unscreened units at PH1 or PH2, and follow the turbine operating priority in the Fish Passage Plan
- Operate PH2 as the first priority; fully load PH2 before operating PH1
- Operate turbine units within 1% peak efficiency

- Operate juvenile and adult facilities according to criteria
- Beginning the morning of March 3, operate the corner collector for a period of 5 days, to the morning of March 8. Provide a sixth day, to the morning of March 9, of corner collector operation and tailwater compensation if there are sufficient numbers of hatchery fish still passing the project. The presence of low hundreds of fish per day shall be interpreted as "sufficient" for the provision of an additional day of protection, based on fish passage index numbers for the sample ending the morning of March 8.
- Concurrent with the operation of the corner collector, operate the Bonneville project to maintain a minimum 12.5-foot project tailwater elevation. Based on last year's corner collector operation, which produced TDG readings approaching 108%, a 12.5-foot minimum project tailwater should be sufficient to maintain a maximum level of 105% TDG (factored for depth compensation) at the chum redds in the Ives Island complex, and on the Oregon shore to the Multnomah area.
- We request that the action agencies use the flexibility in the system to accomplish this while maintaining the target elevation of 1255 feet at Grand Coulee by March 31 to accommodate drum gate maintenance planned by reclamation.

The group devoted a few minutes of discussion to TDG monitoring and regulation in association with this operation. In response to a question, Jim Adams said it is his belief that the Cascade Island and Camas/Washougal gauges are reporting accurate data at this time. In response to another question, Wills said a total of 7.4 million Spring Creek fish are being released today, half of the hatchery's 2005 production.

Wellschlager said the action agencies have been discussing this SOR; he said the one sticking-point has been the additional foot of depth compensation the salmon managers are requesting. The lower river really isn't set up to maintain that operation for more than four days, he said. One thing we talked about yesterday was starting out at 12.5 feet, monitoring the TDG levels and modulating the tailwater elevation if, by chance, TDG levels are lower than expected. The problem is that we're going to have to suck the lower river pretty much dry to accomplish this operation, he said. The fear is that is we go more than four days, the lower river physically won't have enough water to maintain the 11.5 foot tailwater depth beyond Sunday, said Wellschlager.

One other issue, said Wellschlager – having somebody out at the corner collector sampling facility starting tomorrow morning, so that we can turn on the corner collector as soon as the fish start arriving, but not before. That's reasonable, Will replied.

In response to a question from Turner, Jim Adams said that, with TDG levels already near 108%, even without the corner collector in operation, he would expect to see TDG levels in excess of 108% once corner collector operation begins. However, the real measure is what the TDG level is over the redds at Ives Island, Margaret Filardo observed – the TDG level at the fixed monitoring stations below Bonneville is just an indicator. Larry Beck noted that there is currently 2.3 Kcfs of attraction spill through the end bays at Bonneville; if we shut that off temporarily, would that reduce TDG levels? Yes, Adams replied, but it's hard to say how much.

After a few minutes of additional discussion, Henriksen reiterated that the lower river isn't necessarily set up for the additional foot of compensation depth requested by the salmon managers. The forecast, as we've heard, is trending downward. We've agreed to open the corner collector tomorrow morning, she said; the question is, where is the additional 15-20 Kcfs going to come from? At the moment, we're planning to use some of the storage in John Day pool, but there is a minimum irrigation elevation, 262.5 feet, at that project, and irrigation is already underway on both the Oregon and Washington shores. If we have to continue using John Day to support this operation through the weekend, we will go below the minimum irrigation pumping depth over the weekend. The irrigators can go without water for a few days, but if this operation continues into Monday, we need to figure out where the water to maintain the operation, and to refill John Day pool, is going to come from. There is some storage at Grand Coulee, but we're physically limited by travel time and by the 1-foot-per-day draft limit at that project. With a two-day travel time from Grand Coulee to John Day, under the best circumstances, the action agencies are concerned about maintaining this operation for even four days, let alone six, potentially, Henriksen said.

Options include potentially stopping the corner collector operation, or adjusting the tailwater elevation based on field surveys at the spawning site, Henriksen said. The request for a 12.5-foot tailwater elevation was based on an estimate, said Wills; we will look closely at the TDG measurements at the redds. I think I would prefer to wait until Monday, to look at fish numbers, at TDG levels and at how much water the operation has used, before making the decision about whether or not to continue the operation, he said. In response to another question from Beck, Wills said he is willing to discuss shutting down attraction spill at Bays 1 and 18 during the Spring Creek operation with the other salmon managers, but cannot agree to shutting off spill at today's meeting. Turner mentioned another potential option: operating a couple of MGR units at PH1 to move the corner collector flow more into the center of the river. Julie Ammann suggested that it may also be feasible to fluctuate the Bonneville tailwater depth depending on time of day.

After a brief caucus break, Henriksen said the action agencies are ready to start the requested operation tomorrow. We've had a good brainstorming session today, she said; it is the Corps' preference to have the guys at the project monitoring fish arrival tomorrow, and start operating the corner collector as soon as significant numbers of fish begin to arrive (no later than 3 p.m.), rather than waiting until Friday. That way, she said, we'll have TDG data by Friday, to give us a better read of the TDG impacts of the corner collector operation. It was agreed that there will be a TMT conference call this Friday. It was further agreed that the salmon managers will discuss the possibility of fluctuating the Bonneville tailwater elevation, and which hours it might be possible to do so. Initially, however, it was agreed that the action agencies will raise the Bonneville tailwater elevation to 12.5 feet. Wellschlager added that, if a miracle occurs and the Corps is able to save some water on this operation, the action agencies may be willing to consider an additional day of Bonneville operations in support of the Spring Creek Hatchery release.

Wellschlager said the chum operation continues to dictate the power operation; there are no major power system issues to report at this time.

***6. Next TMT Meeting Date.***

The next face-to-face Technical Management Team meeting was set for March 16. A TMT conference call was set for this Friday at 1 p.m. to discuss Bonneville operations in support of the Spring Creek Hatchery release(503/808-5190). There may be the need for calls on Saturday and Monday as well. Meeting summary prepared by Jeff Kuechle.

**TMT Participant List**
**March 2, 2005**

| **Name** | **Affiliation** |
|---|---|
| Cindy Henriksen | COE |
| Donna Silverberg | Facilitation Team |
| Tony Norris | USBR |
| Julie Ammann | COE |
| Rudd Turner | COE |
| Ray Gonzales | COE |
| John Wellschlager | BPA |
| Laura Hamilton | COE |
| Eric Braun | COE |
| Robin Harkless | Facilitation Team |
| Ruth Burris | PGE |
| Russ George | WMCI |
| Nic Lane | BPA |
| Tom Haymaker | PNGC |
| Paul Wagner | NOAAAF |
| Cindy LeFleur | WDFW |
| David Wills | USFWS |
| Margaret Filardo | FPC |
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| Don Faulkner | COE |
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| Kevin Nordt | Mid-Cs |
| Dan Bedbury | EWEB |
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| DeAnn Pavlik | Spokane Tribe |
| Bruce MacKay | Consultant |
| Jiong Ji | Avista |
| Tom Le | PSE |
| Richelle Beck | D. Rohr & Assoc. |
| Mike Buchko | Powerex |
| Ron Boyce | ODFW |
| Andrew Englander | SOWS |
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